

From glowbugs@theporch.com Tue Oct 1 06:24:02 1996
Return-Path: <glowbugs@theporch.com>
Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com
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Date: Tue, 1 Oct 1996 06:15:00 -0500 (CDT)
Message-Id: <961001071325_297933488@emout09.mail.aol.com>
Errors-To: conard@tntech.campus.mci.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 308
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: 0

GLOWBUGS Digest 308

Topics covered in this issue include:

- 1) Re: QRP & tubes & a friendly glowbugge list.....
by rdkeys@csemail.cropsci.ncsu.edu
- 2) Re: QRP bottleburner outputs.....
by rdkeys@csemail.cropsci.ncsu.edu
- 3) Re: Where is it??
by rdkeys@csemail.cropsci.ncsu.edu
- 4) Copyright Stuff
by "Barry L. Ornitz" <u856010@eastman.com>
- 5) "Bringing up" old rigs
by "Barry L. Ornitz" <u856010@eastman.com>
- 6) Re: Ham Chat, Intro.
by Roy Morgan <morgan@speckle.ncsl.nist.gov>
- 7) More Copyright Stuff
by "Barry L. Ornitz" <u856010@eastman.com>
- 8) Wanted Escapements
by Stanley Wilson <microres@crl.com>
- 9) Re: More Copyright Stuff
by rdkeys@csemail.cropsci.ncsu.edu
- 10) Re: More Copyright Stuff
by Jeffrey Herman <jherman@hawaii.edu>
- 11) Greetings and Intro
by Bob Marsh <bmarsh@hicom.net>
- 12) New
by "Thomas J. Whalen" <whalen@swcp.com>
- 13) Re: QRP with tubes
by "Brian Carling" <bry@mail1.mnsinc.com>

- 14) Hammarlund manuals on the web
by "Robert Fowle (KC8DBC)" <hammarlund@jacksonmi.com>
- 15) Re: QRP bottleburner outputs.....
by "Brian Carling" <bry@mail1.mnsinc.com>
- 16) Re: Where is it??
by "Brian Carling" <bry@mail1.mnsinc.com>
- 17) Re: QRP with tubes
by "Brian Carling" <bry@mail1.mnsinc.com>
- 18) Re: Ham Chat
by "Brian Carling" <bry@mail1.mnsinc.com>
- 19) Re: Where is it??NA4G gear...
by john <johnmb@mindspring.com>
- 20) FS HQ 170
by John Kitchens <kitchens@earthlink.net>
- 21) Paint Spraying, Safety etc
by KA9EGW@aol.com
- 22)
by billandr@aztec.asu.edu (BILL ANDREWS)
- 23) Tube gear (fwd)
by Jeffrey Herman <jherman@hawaii.edu>
- 24) Re: Good Paint Sprayers
by KA9EGW@aol.com

Date: Mon, 30 Sep 1996 10:21:00 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
To: hmillersound.net
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com
Subject: Re: QRP & tubes & a friendly glowbugge list.....
Message-ID: <9609301421.AA106854@csemail.cropsci.ncsu.edu>

> Yes I would be interested in an informal list to discuss tube projects.

Sounds like another kindred spirite amongst the ether.....

> We might help each other find some tubes also. I dug into my old tube
> box last night and found only one 6AG7 to use for my VFO, hope it still
> works. It was a metal can Mil. Spec.! Found a 6L6 metal also. I have a
> good collection of 73, CQ, QST and various assorted such as Popular
> Electronics that I find some old tube projects. They were mostly
> nostalgia articles, but a few from the era when tubes *were* radio. Also
> I mentioned in the last post that I have the 'Low and Medium Frequency
> Radio Scrapbook'. It is geared to those frequencies, and has a lot of
> tube gear projects, just scale up the frequency components and they fit
> the ham bands.
> I retired this June after 35 years teaching bands in NE and MO, so I
> have some time on my hands right now. Will probably get some kind of job

> to supplement retirement pay and keep busy.
> I ran across a web site that proposed a low power tube station for its
> members. Don't remember what the exact name or address was, but it
> called itself the Pisweaker group. If I find it again, I'll let you know
> where it is, but you can probably find it through a search engine or ham
> radio links. They were trying to get up interest in what we are
> discussing and may be a good contact.
> Keep in touch and lets see what we come up with. As soon as we get gear
> operational, lets try a sked contact. If enough are interested we may be
> able to get up an informal net.
>
> Harley L. Miller WB0ROQ
> QRP-L #393 ARS #77

Harley..... you should join us on the Glowbugs list. It is devoted to
OT firebottle homebrewing of ``glowbug'' sets. Everything from late model
things like a rockbound novice thingie from the 70's to ancient wonders
like Hartleys from the 20's are covered, and the folks there have a veritable
wealth of common knowledge that is an invaluable living treasure of all the
really useful kinds of information.

If you are of interest, send an email to listproc@theporch.com
with a one liner:

SUBSCRIBE yourfirstname yourlastname

and that should do the trick.

We have a nightly BA/GB Friendly Firebottle Fist Function that meets on

QTR 0100Z QRG 7050R500KHZ
QTR 0200Z QRG 3579R545KHZ (TV colorburst rock QRG)
QTR 0300Z QRG 1802R500KHZ
QTR 0400Z QRG 3579R545KHZ (for really OT pre-wwII gear).

You are most welcome to stokes ye up yer firebottles an' join in for some
fun and history and fine OT homebrew funzies.

73/ZUT DE NA4G/Bob UP

Date: Mon, 30 Sep 1996 11:04:14 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
To: jherman@hawaii.edu
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com
Subject: Re: QRP bottleburner outputs.....

Message-ID: <9609301504.AA106967@csemail.cropsci.ncsu.edu>

>

> Yeah, the less-that-or-equal-to 5W output rule for a rig to be in the
> QRP category is a recent (historically speaking) requirement. It's all
> relative of course, for 25W is QRP when the other fellow is running
> 250W. Maybe for glowbuggers, we should call 25W *output* QRP.

Jeff and the gang and the QRP'rs on the side.....

Traditionally, one should consider the basic classes of amateur gear that historically was constructed. In the early days (1920's and early 1930's) there were only 4 classes of power available to hams.

- Class 1. Typically 201A triode power --- usually 1 watt or less output. These rigs ran mostly on battery packs of 90-135 volts on the plate. This is QRPP today, at its finest. This kind of thing would be the 12BY7 xtal novice rig of today.
- Class 2. Typically 210 triode power --- usually 1-4 watts output. These rigs ran mostly on line or motor-generator/dynamotor power (although some were run on large wet cell battery systems) of 250-700 volts on the plate. Inputs usually were around 10 watts, although you could push one to 25 watts if you were careful. The plate dissipation was 7.5 watts (hence the name of ``7.5 watter'' for the tube, generically). This is QRP today, at its finest. This kind of thing would be the 6L6 xtal novice rig of today.
- Class 3. Typically 203 triode power --- usually 10-20 watts output. These rigs ran mostly on line power and occasionally on motor-generator/dynamotor power. Inputs were usually 50-100 watts at voltages from 500-1250 volts on the plate. The plate dissipation was 50 watts (hence the name of ``50 watter'' for the tube generically). This is almost QRP, since in modern usage, we rarely push them as far as they were pushed in the old days. In Hartley oscillator use, running at 10-15 watts input, that still is output of the 5 watt class, and should be considered QRP. This kind of thing would be the 807 or 6146 class rig of today (except in self controlled oscillator use, where an electron coupled oscillator using a 6146 should still only run at 5 watts output for stability).
- Class 4. Typically 204A triode power --- usually 50-100 watts output. These rigs ran mostly on line power. Inputs were usually 100-250 watts on plate voltages of 1000-2500 volts. The plate dissipation was 250 watts (hence the name of ``250 watter'' for the tube generically). This is big gun power,

even today.....

So, for the usual ham in that era, classes 1, 2, or 3 were what were mostly found. Considering the modern 5 watt output power, that would include classes 1 and 2, even by 1929 standards. It could even include the class 3 in self controlled oscillator use.

So, to a great extent, most of us bottleburners are still borderline QRP, even today.

Food for thought. Now back to the Hartley oscillator and to see if I can squeek maybe 3 watts out of it.

73/ZUT DE NA4G/Bob UP

Date: Mon, 30 Sep 1996 11:17:05 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
To: jherman@hawaii.edu
Cc: rdkeys@csemail.cropsci.ncsu.edu ()
Subject: Re: Where is it??
Message-ID: <9609301517.AA106996@csemail.cropsci.ncsu.edu>

> Another source is our resident Elmer, Boatanchor Bob NA4G. He's
> got some early xmtrs in the archives either on here or over on
> the BA list. (Bob, where dey be at?)
>
> 73,
> Jeff KH2PZ / KH6

Gee, that be an interestin' moniker..... resident Elmer.... sounds like me
feet be planted too long ashore, and growin' roots they be.....(:+}}.....

Most of my stuff is in one of two places.....

1) ftp.theporch.com in /pub/mailling-lists/boatanchors

or

2) sunsite.unc.edu in /pub/academic/agriculture/agronomy/ham/things-to-build
or /pub/academic/agriculture/agronomy/ham/boatanchors/NA4Gfiles
NA4Gpix

although the pictures of the gear are also on the web in various places,
but I dunno exactly where, rightoff. Someone add the pointers thereto
to them.

73/ZUT DE NA4G/Bob UP

Date: Mon, 30 Sep 1996 11:13:23 -0400 (EDT)
From: "Barry L. Ornitz" <u856010@eastman.com>
To: john <johnmb@mindspring.com>
Cc: Glowbugs Mailing List <glowbugs@theporch.com>
Subject: Copyright Stuff
Message-ID: <Pine.ULT.3.91.960930110827.2342C-100000@dua150.kpt.emn.com>

John,

Thanks for bringing this up. In some recent discussions with Jack Hill, I was "volunteered" to write a FAQ about copyrights for the lists. Even photocopying the old Surplus Conversion Manuals can get us in trouble. I talked with Mike Ulbaldini, who used to be our research library head until a promotion, about copyrights. He has served on several international committees and is quite knowledgeable in this area. I hope to write up something later this week.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

Date: Mon, 30 Sep 1996 11:02:42 -0400 (EDT)
From: "Barry L. Ornitz" <u856010@eastman.com>
To: "Stephen M. Smith" <sigcom@juno.com>
Cc: Glowbugs Mailing List <glowbugs@theporch.com>
Subject: "Bringing up" old rigs
Message-ID: <Pine.ULT.3.91.960930103535.2342A-100000@dua150.kpt.emn.com>

Welcome to Glowbugs. It will be nice to see more activity in this group.

In his note to Glowbugs, Stephen M. Smith said:

> I'll bring it up slowly on a variac to let the electrolytics "heal" and
> to let the getter in the 6L6 clean up the vacuum.

I just thought I might mention two things here. If the rig uses a vacuum tube rectifier, temporarily use solid-state silicon diodes until you get the primary voltage up to 90 volts or so. Without doing this, the capacitors do not get much reforming voltage until the rectifier begins conducting; by then the voltage may be above their rating already.

The second thing is that getters in tubes are essentially "one-shot" devices.

They do not depend on the tube being hot, and for the most part, the getter ceases to do much of anything past the first few weeks of the life of the tube. Once the getter surface is used up by becoming completely covered by adsorbed gases, it is useless. Getters are "fired" during tube manufacturing via induction heaters external to the tube. There is little or nothing you can do to "rejuvenate" at tube's getter.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

Date: Mon, 30 Sep 1996 11:35:07 -0400
From: Roy Morgan <morgan@speckle.ncsl.nist.gov>
To: glowbugs@theporch.com
Subject: Re: Ham Chat, Intro.
Message-ID: <9609301535.AA25793@speckle.ncsl.nist.gov>

At 02:42 PM 9/28/96 -0500, you wrote:

>QRP with tubes gang,

>

>Bry and I have thought about a "sched" for this group on one of the
>internet chat lines.

Bry, Steve, and all glowbuggers:

I'm gonna check out the chat line - thanks to Steve for the instructions.

Intro:

I've held my call, K1LKY since about 1961. (I've been ignoring all this stuff about vanity callsigns and such ever since.)

I'm an avid firebottle collector and user - both for ham stuff and for hifi, too. The Grand Junque Boxe is still located in 1-land, western Mass, but seldom visited now.

Present location is Gaithersburg, MD, where the current junque boxe and la-bor-a-tory is located.

Equipment on hand includes:

- Receivers: R-390's, NC-183D, TMC GPR-90, HRO-5 and -60, and some RAL/RAK's
- Transmitters: Viking Valiant, HT-32, home brewed Novice Gallon and 40's 811 rig.
- test equipment by HP, GR, and others.
- documentation archive: from the 30's on.

Top priority projects are:

- Upgrades to the inverted L for 160, 80, and 40
- Hartley transmitter from the 1934 QST article with period parts and tube.
- the above plus an RAL Navy regen receiver (1939) will be the glowbug station.

-- Roy Morgan/Building 820, Room 562/Gaithersburg MD 20899
(National Institute of Standards and Technology, formerly NBS)
301-975-3254 Fax: 301-948-6213 morgan@speckle.ncsl.nist.gov --

Date: Mon, 30 Sep 1996 11:39:02 -0400 (EDT)
From: "Barry L. Ornitz" <u856010@eastman.com>
To: Brian Carling <bry@mail1.mnsinc.com>,
Cc: john <johnmb@mindspring.com>
Subject: More Copyright Stuff
Message-ID: <Pine.ULT.3.91.960930113457.2342D-100000@dua150.kpt.emn.com>

Brian Carling wrote:

> Ask around, John. I believe that copyrights expire after 17 years.
> At least with SONGS they do!

They used to be "the life of the author plus 50 years" but according to the Berne Convention (which the USA is signatory to), copyrights are now 75 years.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

Date: Mon, 30 Sep 1996 08:32:55 -0700 (PDT)
From: Stanley Wilson <microres@crl.com>
To: glowbugs@theporch.com
Subject: Wanted Escapements
Message-ID: <Pine.SUN.3.91.960930083143.3536A-100000@crl7.crl.com>

Any of you old timers know where I can obtain some escapements like they used on R/C model planes in the 50's ?
de stan ak0b

Date: Mon, 30 Sep 1996 13:49:10 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
To: ornitz@eastman.com
Cc: rdkeys@csemail.cropsci.ncsu.edu (), boatanchors@theporch.com,
Subject: Re: More Copyright Stuff
Message-ID: <9609301749.AA107230@csemail.cropsci.ncsu.edu>

> Brian Carling wrote:
>
> > Ask around, John. I believe that copyrights expire after 17 years.
> > At least with SONGS they do!
>
> They used to be "the life of the author plus 50 years" but according to
> the Berne Convention (which the USA is signatory to), copyrights are now
> 75 years.
>
> 73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

Interpreted, to some extent with a boatanchorite/glowbuggite twist
on the 75 year copyright span.....

....those fine ancient radio works predating the current year by
75 years are now public domain. Thus things like Bucher's ``Practical
Wireless Telegraphy'' (1917) are open game. That is fun for us history
types that love to run amok amid the dusty library stacks chasing after
new slants on rotary spark gaps, etc.....

I am waiting for 1998 to roll around so things like John Irwin's
``Radio'' classic are open game. In the year 2000, it is Mary
Loomis's classic ``Radio Theory and Operation''. In 2003, it is
Sterling's ``Radio Manual'' first edition.

Some of these early works are rather hard to find, so, it would be a
tribute to their authors to someday, perhaps, have them reissued as
classics on CD-ROM or freely available as reprints on the internet.
That I why I reprinted Alfred Vail's classic work on the electric
telegraph (1847) and put it into the BA archives. They are historical
treasures worth keeping in the public eye. (Also, it was only about
50 pages, so I could type that in over several evenings without too
much eyestrain or myopia setting in). Others are in the works, as
time permits. Express permission to copy or reproduce or reprint should
be obtained, on works within that 75 year span. Else, older stuff is open
game.

Actually, if the publisher can be found, or is still in existence, and you explain what it is you are trying to do, they are often quite cooperative. QST has been good, in my case, for authorizing me to reprint a few things for our local radio club homebrew special interest group, with just email requests and authorization. They just want to basically insure that proper citation ``Reprinted courtesy QST'' is made in the title page footnoting.

I am wondering how that reprint house that redid the 1934 Short Wave Manual did it? Quite probably, they found the original publishing house, and merely asked for its use. At worst, they are paying a small copyright use fee per reprint sold.

On things for which the author is not living or the company that published it is not extant, there are academic grey areas where fair use can be made without violating copyrights. This is commonly done in academia every day, without any concerns or problems, unless you use excessive copying of available works for class use. Since most of us are in this old radio gambit for at least some academic learning, it can be made to apply on copying for academic use. That would not apply to wholesale selling of copies at hamfests. But, for a copy or two for a group wishing to learn about a certain design or test its operating, or consider it's historical merit, etc., fair use would apply.

Barry was supposed to write us up a definitive treatise on the subject. Please do! It is a relatively important topic about which we all need some insights.

73/ZUT DE NA4G/Bob UP

Date: Mon, 30 Sep 1996 09:13:41 -1000
From: Jeffrey Herman <jherman@hawaii.edu>
To: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Re: More Copyright Stuff
Message-ID: <Pine.GS0.3.93.960930090637.29987C-1000000@uhunix5>

Regarding the two books we've got here ("104 Ham Projects..." and "101 Ham Projects...") (lots of 1, 2, and 3, tube xmtrs), I will contact the publishers (one is TAB) and ask for their permission to have the circuits scanned onto the BA list archives. If permission is granted, who is interested in doing the scanning?

73 from lovely Hawaii (I'm DX!),
Jeff KH2PZ / KH6
.. DE NMO UP 440 KC . .

Date: Mon, 30 Sep 1996 15:32:07 -0400
From: Bob Marsh <bmarsh@hicom.net>
To: Glowbugs List Server <glowbugs@theporch.com>
Subject: Greetings and Intro
Message-ID: <32502037.7519@hicom.net>

Hello Everyone,

This is my first posting to the Glowbugs list. It looks like I'll find all of my favorite subjects here - tube rigs, homebrew and QRP. I've been a ham for around two years, and have a General ticket. I mainly work CW, but have been known to "break down" and do some SSB. I'm also a member of Navy Marine Corps MARS in the NJ/DE area (NNNOHHM), and the assistant area coordinator.

Since I got into radio, I've been trying to learn electronics and how to restore and maintain tube rigs. I have several tube rigs (mostly heathkit) that I'm trying to restore and add to my station. My biggest problem is figuring out where the voodoo stops and the technology begins! I'll get there though.

I'll be happy to share my experience (as meager as it is) to be able to "pick the collective brains" of the group. (QRP? Toobz? Homebrew? - Jeez, what'll they think of next?)

72/73 (whatever) de Bob/KB2SGM

--

Bob Marsh - KB2SGM <bmarsh@hicom.net> NJ-QRP #39 QRP-L #724.
CW, QRP, Homebrew & Boatanchors - What a Mix
"Jeez, is it REALLY supposed to do that?"

Date: Mon, 30 Sep 1996 14:14:19 -0600 (MDT)
From: "Thomas J. Whalen" <whalen@swcp.com>
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: New
Message-ID: <Pine.SUN.3.91.960930140731.11226E-100000@kitsune.swcp.com>

Hi all, I just heard about your group the other day and thought I would subscribe. I enjoy qrp type operating and my first rig was a Bare Essentials xmtr, back in 68 when I was a Novice. Im going to build that rig again and put it on 40. Anyone out there still have there original

B.E.xmtr? I know one fellow that gets into this post, John WB50AU....Hi John! We used to be neighbors when he lived here in Albuquerque. Im going to really enjoy this post and am looking forward to great articles on suple tube type rigs. 72 and 73 Tom WB5QYT QRP-L #640

Date: Mon, 30 Sep 1996 13:24:00 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: glowbugs@theporch.com
Subject: Re: QRP with tubes
Message-ID: <199609302023.QAA29935@user2.mnsinc.com>

Bob Rolfness wrote in glowbugs:

> Brian - I'd be interested in such a project. Ever since joining the
> list I've though about my first novice transmitter in 1954. In those
> days the ARRL had a publication called HOW TO BECOME A RADIO AMATEUR and
> if I remember correctly it contained a single 6V6 crystal oscillator
> transmitter.

Sounds like great fun. the 6V6 and 6L6 are such EASY forgiving tubes to work with - so long as you don't try 1200-1500 Volts on the plate circuit, he he!

>The little rig was most unique for it was constructed on a
> wooden chassis formed by 2 end blocks holding 2 parallel slats
> which between them were a tube and crystal socket.

Well, you know that is ONE way to build 'em - kind of open frame. With QRP there is not usually a TVI problem. I once visited Don Hoisington (W4CJY I think?) in Alabama who had a lot of BIG QRO tube rigs built on frames made of PINE 2" X 2" - es and covered with chicken wire in places. Other places just open or with hardboard at the back. He likes to kep his modulation xfmrs and power xfmrs sitting loose on the floor next to the rigs! Those glowing 4-1000s are really a sight!

[SNIP]

>BTW - The receiver was an ARC-5 and I had one crystal, 3701
> Kcps. I turely was in HOG HEAVEN.....

Yes, I had an ARC-5 receiver for a while - I think it was one that covered part of 75meters. Kinda poor but worked!

> I've often thought about reconstructing this rig.
>

> 73's Bob W7VZX

Hey why not, Bob - you could do it this winter and QSO with some of the rest of us that are building these little beasts!

I am thinking about a VFO controlled rig with XTALs as an option (maybe 3 or 4 of them) for use during warm-up!

40 meters is one of my favorite bands but I also like 30 a lot too. 20 is fine for QRP so long as you can manage the stability well.

72 de AF4K, Bry
Brian Carling in Gaithersburg, Maryland, USA
bry@mnsinc.com
<http://www.mnsinc.com/bry/>

Date: Mon, 30 Sep 1996 17:00:26 -0400
From: "Robert Fowle (KC8DBC)" <hammarlund@jacksonmi.com>
To: boatanchors@theporch.com
Cc: glowbugs@theporch.com
Subject: Hammarlund manuals on the web
Message-ID: <2.2.16.19960930170143.1cb79592@fvmail.com>

Hi all!

Just put up my 'new' page for Hammarlund manuals and i also included some trival information with it, to make it worthwhile to read each item listed. the http.. is in my sig. just scroll thru and 'tag' "Hammarlund Manuals" let me know what you think...will start on another page soon..but this stuff isn't like typing to the BA list....<grin>
have fun and enjoy

=====]-[->
Robert Fowle KC8DBC
The HAMMARLUND Historian
Ph. 517-789-6721
1215 Winifred
Jackson, Mich. 49202-1946
E-mail: hammarlund@jacksonmi.com
Web Page: <http://www.jacksonmi.com/hammarlund>
HAMMARLUND LITERATURE WANTED
WANTED: MANUALS FOR ANY MAKE RADIO EQUIPMENT
=====]-[->

Date: Mon, 30 Sep 1996 14:09:15 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: QRP bottleburner outputs.....
Message-ID: <199609302108.RAA03448@user2.mnsinc.com>

BA Bob writes:

> > Yeah, the less-that-or-equal-to 5W output rule for a rig to be in the
> > QRP category is a recent (historically speaking) requirement. It's all
> > relative of course, for 25W is QRP when the other fellow is running
> > 250W. Maybe for glowbuggers, we should call 25W *output* QRP.
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> Jeff and the gang and the QRP'rs on the side.....
>
> Traditionally, one should consider the basic classes of amateur gear
> that historically was constructed. In the early days (1920's and
> early 1930's) there were only 4 classes of power available to hams.
>
> Class 1. Typically 201A triode power --- usually 1 watt or less output.
> These rigs ran mostly on battery packs of 90-135 volts on the
> plate. This is QRPP today, at its finest. This kind of
> thing would be the 12BY7 xtal novice rig of today.

[snip]

INTERESTING stuff Bob ... I am younger I guess (at 45) and base my
idea of QRP on my experience growing up in G-land where many fellas
ran rigs with 10 watts input power. But anything under about 25 watts
input would be QRP really. I think many G ops back then would have
considered 10 watts OUPUT as QRP, whereas we all knew that if you
wanted to work DX from W-land or even Europe it helped a heck of a
lot if you could get around 100 watts output power.

I think the designation of TEN watts came from the power limit on
160m which was the local chat band when I was coming up.
There were JUST getting started with 2m AM (not FM) with the surplus
Pye Westminster type rigs over there.

More tube stories later boys & girls!

73 de G3XLQ / AF4K

Bry

>
> Food for thought. Now back to the Hartley oscillator and to see if I can
> squeek maybe 3 watts out of it.
>

> 73/ZUT DE NA4G/Bob UP

>

>

>

Brian Carling in Gaithersburg, Maryland, USA

bry@mnsinc.com

<http://www.mnsinc.com/bry/>

Date: Mon, 30 Sep 1996 14:09:14 +0000

From: "Brian Carling" <bry@mail1.mnsinc.com>

To: rdkeys@csemail.cropsci.ncsu.edu

Subject: Re: Where is it??

Message-ID: <199609302108.RAA03412@user2.mnsinc.com>

GREAT STUFF Bob - many thanks for posting this information!

I can't wait to go exploring those archives, he he!

AF4K

> Date: Mon, 30 Sep 1996 09:51:09 -0500 (CDT)

> Reply-to: rdkeys@csemail.cropsci.ncsu.edu

> From: rdkeys@csemail.cropsci.ncsu.edu

> To: Multiple recipients of list <glowbugs@theporch.com>

> Subject: Re: Where is it??

> > Another source is our resident Elmer, Boatanchor Bob NA4G. He's

> > got some early xmtrs in the archives either on here or over on

> > the BA list. (Bob, where dey be at?)

> >

> > 73,

> > Jeff KH2PZ / KH6

>

> Gee, that be an interestin' moniker..... resident Elmer.... sounds like me

> feet be planted too long ashore, and growin' roots they be.....(:+}}.....

>

> Most of my stuff is in one of two places.....

>

> 1) ftp.theporch.com in /pub/mailling-lists/boatanchors

>

> or

>

> 2) sunsite.unc.edu in /pub/academic/agriculture/agronomy/ham/things-to-build

> or /pub/academic/agriculture/agronomy/ham/boatanchors/NA4Gfiles

> NA4Gpix

>

> although the pictures of the gear are also on the web in various places,

> but I dunno exactly where, rightoff. Someone add the pointers thereto

> to them.
>
> 73/ZUT DE NA4G/Bob UP
>
>
>
>

Brian Carling in Gaithersburg, Maryland, USA
bry@mnsinc.com
<http://www.mnsinc.com/bry/>

Date: Mon, 30 Sep 1996 13:24:02 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: marty@aa4rm.radio.org
Subject: Re: QRP with tubes
Message-ID: <199609302024.QAA00232@user2.mnsinc.com>

What bands does it cover, Marty?
I've never even seen one!

> To: Multiple recipients of list <glowbugs@theporch.com>
> Subject: Re: QRP with tubes

>
> I've got one of those tiny Lysco 6aq5 rigs / Marty
>
>
>

Brian Carling in Gaithersburg, Maryland, USA
bry@mnsinc.com
<http://www.mnsinc.com/bry/>

Date: Mon, 30 Sep 1996 14:31:32 +0000
From: "Brian Carling" <bry@mail1.mnsinc.com>
To: sigcom@juno.com
Subject: Re: Ham Chat
Message-ID: <199609302130.RAA05747@user2.mnsinc.com>

Darn it! HERE's that message I have been looking for!

Well, Stephen, WHEN do you suggest as a time for us all to get on for
a live chat?

Want to try about 8 p.m. Eastern time this evening?

That might be fun even if only 4 or 5 of us make it!

> Date: Sat, 28 Sep 1996 14:42:09 -0500 (CDT)
> Reply-to: sigcom@juno.com
> From: sigcom@juno.com (Stephen M Smith)
> To: Multiple recipients of list <glowbugs@theporch.com>
> Subject: Ham Chat

> QRP with tubes gang,

>

> Bry and I have thought about a "sched" for this group on one of the
> internet chat lines. It might be a way for us to get our on-air sched
> cranked up too, especially when the conditions are flaky. Might I
> suggest the Webchat Broadcastin System (WBS)? They have a ham chat
> channel already set up. It is usually pretty quiet there, so I think it
> would be a good place to meet. WBS' URL is:

>

> <http://wbs.net/>

>

> When you go there, if you are not already a user, just poke the "New
> User" button and follow the prompts to sign up. Registration is free.
> You will chose your own "handle", which can be your call sign or anything
> else you want to use, and a password. They will e-mail you a
> confirmation number which you use to login for the first time. After
> logging in, go to "Home & Living" then to "Hobbies & Crafts" then to
> "Amateur Radio". I have two other suggestions: (1) After you get to the
> ham chat room the first time, bookmark that location so you don't have to
> go through the hassle of logging in everytime. (2) Turn off "Show
> Pictures" or "View Images" in your browser so you don't have to wait
> while all the junk is downloaded. Just using text makes things alot
> faster.

>

> That's it. Let us know what you think.

>

> 73.....Steve, WB6TNL

>

>

Brian Carling in Gaithersburg, Maryland, USA

bry@mnsinc.com

<http://www.mnsinc.com/bry/>

Date: Mon, 30 Sep 1996 17:45:38 -0400 (EDT)

From: john <johnmb@mindspring.com>

To: rdkeys@csemail.cropsci.ncsu.edu, glowbugs@theporch.com

Subject: Re: Where is it??NA4G gear...

Message-ID: <2.2.16.19960930174649.291fb36c@pop.ral.mindspring.com>

At 09:51 AM 9/30/96 -0500, you wrote:

>although the pictures of the gear are also on the web in various places,
>but I dunno exactly where, rightoff. Someone add the pointers thereto
>to them.

They're in living color at:

<http://www.mindspring.com/~johnmb/>

take the link to the Radio Room, then click to NA4G's collection.

/john

```
+-----+
| John Brewer          johnmb@mindspring.com          |
| WB50AU/4             AMI #24             Clayton, NC |
| Vintage Gear web page: http://www.mindspring.com/~johnmb/ |
+-----+
```

Date: Mon, 30 Sep 1996 20:06:06 -0700 (PDT)
From: John Kitchens <kitchens@earthlink.net>
To: glowbugs@theporch.com
Subject: FS HQ 170
Message-ID: <199610010306.UAA08677@germany.it.earthlink.net>

I have an HQ 170, no clock, but everything else in good to excellent condition. I am willing to sell it, but am not sure how much it is worth. If you are interested, please email me at kitchens@earthlink.net, with a price including shipping. It works!

John, NS6X

Date: Mon, 30 Sep 1996 23:33:49 -0400
From: KA9EGW@aol.com
To: bill.sorsby@dlep1.itg.ti.com
Subject: Paint Spraying, Safety etc
Message-ID: <960930233348_297768442@emout02.mail.aol.com>

The airless sprayers are designed for house paint; for BAs I suggest a top-quality high-volume, low-pressure spray gun such as the Binks Mach 1. I recommend a high volume low-pressure (HVLP) gun to minimize overspray if you don't want to screw around with laminar-flow ventilation systems and all the headaches that go with them. In California non-HVLP guns are already a no-no. Besides, with good paint now \$40-\$50 a quart, do you really want to put 40% of it in the air where it will settle on everything?

Stay away from the cheap spray guns; a good one will set you back \$150 or more but this is one area where cheap tools are definitely false economy. It is not possible to do a good job with inadequate tools or training. Make sure you have an oil trap and dryer on the air line! Suggest you ask around your circle of friends and here on the list and see if there are any body-and-fender types, and get their recommendations. You might also check some of the rec.auto.*.* newsgroups.

And please, please use a proper breathing mask for the job, with the PROPER filter cartridges for the type of solvents in the paint you're using.

Permanent brain, liver, kidney, nervous system and visual damage is no fun, nor are soft-tissue cancers. Been there, done that. Didn't like it. For spraying stuff up to the size of an R390A cabinet, I use a Binks "touchup gun" which is meant for spraying one-panel autobody touchups; holds a pint. By the way, the infamous "St. James Grey" Collins finish was achieved with a lot of air pressure, a fast-drying reducer and holding the gun about 3' off the workpiece so the paint was about half-dry when it hit. I haven't done any National gear, but I will advise--stay away from the polyurethane two-part epoxies. In the hands of an expert they give beautiful results, and the best is Sikkens brand, but for the average Joe doing a BA or two, a good acrylic lacquer is a lot easier to work with, and no matter how crummy a job one does it still looks good after its buffed out. Most BAs are a low-gloss industrial finish which lacquers give a lot of flexibility in varying the finish by varying the nuances of the method of application. The polyurethanes are for one thing only--high-gloss automotive finishes, and however it lies down when you spray it, is what you get. On top of that, many of the polyurethanes use a toluene diisocyanate monomer (deadly poison!) catalyst requiring a Bureau Of Mines-approved outside breathing-air supply. TO ANYONE FIXING TO PAINT A BA, I'M NOT JOKING--ISOCYANATE CATALYSTS USED INDISCRIMINATELY WILL PERMANENTLY F@#\$ UP YOUR HEALTH AND/OR KILL YOU!!! I AM (BARELY) WALKING PROOF OF THAT!

Now that I've got that off my chest, let me say proper surface prep is mandatory. No rust, no old paint, no oil! Water-based strippers and the like I have never been able to completely clean off so it didn't eventually bubble out from under the new paint sooner or later. A decent sandblaster from Sears is about \$89. Badger makes a "Hobby Abrasive Gun" sells for about \$50 at the hobby shop and uses a very fine aluminum oxide powder (or Comet cleanser) and looks suspiciously like a jeweler's sandblaster. I've used it to recover some front panels I thought hopelessly lost; with a light touch I can even sandblast and clean up roller coils and variable caps. Try to keep the aluminum oxide away from ceramics though. Comet's pumice powder is better for that--less risk of flashover. And be sure to get all that stuff

out of bearings and the like or the part will be destroyed over time as the bearings, rollers and contacts are ground away. The local tombstone works or welding shop may be able to help too...

Hope this helps...

73, Brian KA9EGW

Date: Mon, 30 Sep 1996 22:43:40 -0700 (MST)
From: billandr@aztec.asu.edu (BILL ANDREWS)
To: glowbugs@theporch.com
Message-ID: <9610010543.AA12984@aztec.asu.edu>

unsubscribe glowbugs

--
Bill Andrews
billandr@aztec.asu.edu

Date: Mon, 30 Sep 1996 21:41:58 -1000
From: Jeffrey Herman <jherman@hawaii.edu>
To: Glowbugs List <glowbugs@theporch.com>
Subject: Tube gear (fwd)
Message-ID: <Pine.GS0.3.93.960930213859.19572C-1000000@uhunix5>

The following appeared on QRP-L; let's see if we can get this guy to sub to GB! He'd be a welcome addition.

Jeff KH2PZ

----- Forwarded message -----
From: Alex Mendelsohn <alexmpennwell.com>
Subject: Tube gear

It sure is interesting to see the discussion of the tube-type gear for QRP here on QRP-L. Gee, I remember the Pop'tronics and Radio-Electronics articles of the late Fifties when I was a kid. I vaguely recall how I built a 6AQ5 rig on a clear plastic box of some sort. In those days, I had no idea about how to couple power into my 12-foot high dipole, and didn't work much with the 6AQ5 rig! Snagged a few locals though.

I did manage to QSO with Ivor Stafford, VK3XB on the 40 meter Novice band however (and still cherish the pasteboard). I'm certain some of the older members of QRP-L remember when Ivor used to listen for Novices on 40 meters. Herb Brier (W9EGQ?) would list the callsigns of the Stateside Novices that Ivor worked. What a thrill to QSO him with my 6AG7-6L6 Heathkit AT-1 and pipsqueak antenna (I wonder if anyone on the list here has an AT-1 for sale or swap? I have a really nice DX-35 to trade!)

Much more recently, I put together a 6L6 Colpitts oscillator for use on the Antique Wireless Association's annual Old Time Radio contest. Trying to keep the replica of a 1939 rig reasonably authentic, I used a Type 80 rectifier and a VR-150 gaseous regulator tube and a glass 6L6. It runs about 8 watts input and perhaps 5 or 6 watts out. My only concession to modernity was the use of a pi-net in the plug-in coil plate circuit and the use of a TV-style power transformer donated to me by N2FNI.

What a ball I've had with this xtal-controlled rig on 80 and 40. During the AWA tests, I routinely work into the Caribbean on 80 meters, and raise stations all over the country, including 6-land, from my QTH here in southern Maine. It's fun to lightly grasp the plug-in coil at the end of a QSO, and "wobulate" the signal a bit when signing off to give the other guy a kick and let him know it's really not a ricebox rig he just worked. ;-)

Perhaps even more amazing is the fact that most stations participating in the AWA tests use old receivers from the 20s and 30s. I used a 1938 Hammarlund HQ-120 until I decided to take the bull by the horns and see what a regenerative set would do. I finally built one up after locating a Bud plug-in coil set (in the original box) under a table at a hamfair. My receiver uses a Type 27 tube and a Type 24 (one is a regenerative detector and the other is a single stage of audio). It's built on a wooden board (of course) and it works just fine! It's very touchy to adjust, but is amazingly sensitive with lotsa audio into the old ear-flatteners (Trimm Professional headphones). I actually copied UA2BD on 80 CW with it one night using a hank of wire on the floor of the shack in the basement!

If anyone would like a schematic of either rig, I'd be happy to supply copies if you'll send along an SASE to make my already harried and busy life easier. CBA is okay.

Vy 73, Alex in Kennebunk, Maine, QRP-L #687 .-.-.

Date: Tue, 1 Oct 1996 07:13:26 -0400
From: KA9EGW@aol.com

To: basalop@eskimo.com

Subject: Re: Good Paint Sprayers

Message-ID: <961001071325_297933488@emout09.mail.aol.com>

I have a Badger 100, internal-mix double-action airbrush I use for extremely tiny touchups and for detailing model railroad cars and touching up panel lettering, and a Badger 150 internal-mix single-action better suited to slightly larger jobs such as spot-blending a paint chip. For anything bigger than, say, an R390 tuning knob, either is a bit on the small side for consistent results. With the biggest needle and nozzle I suppose one could paint a BA cabinet, but it would take the patience of a saint not to have a "striped" effect; even wide open a spray pattern more than an inch or two wide is asking a lot, and at that, the airbrush generates a horrendous amount of overspray by the time the air is turned up high enough to generate that big a spray pattern. The limited (2 ounce max) reservoir capacity gets to be a bit irritating too.

When I was spraying for a living, I also used a Binks Wren external-mix single-action for stuff up to DX-20 size, but cranked open for that it had a coarser spray pattern and a tendency to spatter a bit.

With the paint we were using (a thin, water-based baking enamel in that application; I used a Binks Mach 1 HVLP gun for spraying the polyurethanes but more on poly's later) it didn't matter much, that stuff flowed out nicely, but for touching up a BA where a texture match would be important, it would.

Of course, for smooth-finish work like the old, old Hallicrafters (S20R era) where there is no texture and the paint laid on like glass, the finer the spray pattern the better. For textured finishes like Heath SB-series green or St. James Grey, if you want to match the texture properly, a spray implement of comparable capacity to that originally used is in order.

There's some leeway here, but not a lot.

For wrinkle finishes, the bigger guns are in order because the degree of wrinkling is a function of coating thickness, and it's a lot easier to get a consistent coating thickness with a larger gun and fewer passes. The larger guns also have the advantage that if one insists on spraying a fast-tacking, slow-drying, hard-to-work, very-narrow-window-of-thickness paint (like a polyurethane where a bit too light and it beads up and a bit too heavy and it bubbles up like a pancake ready to be flipped--just before it starts dripping off the workpiece), the bigger ones allow you to lay on about 3 dozen very light "fog" coats, leaving a "sandpaper" finish, and then shoot a "blend" coat of straight reducer over the top to flow it out like glass (and start to clean the gun in the process), all before the stuff hardens in the gun (it's a 2-part catalyzed and doesn't need air to cure).

I've had my say on the safety issues and etc of isocyanate catalysts already on this list, but these paints are the current darlings of paint salesmen (try US\$60 a quart--that's sixty dollars a quart, and another \$38 for a gallon of reducer) and they do give an outrageously tough, hard, impermeable finish, and it's inevitable someone will try it. By the way, when they say practice on a test panel first--you DON'T want to have to sand this stuff off

and start over. When I screwed up a polyurethane job where I worked, we had to soak the workpiece in liquid methylene chloride (also carcinogenic, flammable, burns like hell if you get it on your skin, vapors eat plastic, low flashpoint, not sold to civilians etc etc) to get the paint off.

Fortunately, the really nasty ones like LenMar brand (with it's lead pigment unless that's changed since I left that job in 1994 after 8 years) you have to be a professional painter to be able to buy at all in a lot of areas. Maybe it sounds like I'm beating this horse to death, but the reality here is one exposure to this stuff can permanently alter your body. You develop antibodies to the isocyanate and further exposure can cause (among other things) anaphylactic allergic reactions (that's choking to death 'cause your throat's swelled shut, and the treatment is a needle full of adrenaline through your chest wall straight into your heart, and other really fun things. Don't try it. I have. It's no fun.). One overexposure to the stuff WILL kill you. Isocyanate has the same "cyan" in the middle as "sodium cyanide" for a reason.

Also, the reducers for some of the polyurethanes are known carcinogenic, mutagenic, teratogenic agents. Nasty shit.

I also realize there's someone out there who leads a charmed life who has sprayed this stuff without safety gear and been unharmed. There's also someone out there who sprayed the stuff without safety gear and was diagnosed with testicular cancer before the age of 30.....

Friends, there are plenty of good water-based enamels, straight enamels, acrylic lacquers out there. The Dupli-Color automotive touchup spray cans are some kind of lacquer. There's no good reason to have to risk your life to shoot polyurethanes on a BA just because Gomer at the paint store says Goober uses it on his race car and it don't scratch. C'mon--we don't throw rocks at our BAs.

Climbing off my soapbox now...

End of GLOWBUGS Digest 308
